CLAIMS

1. A method for controlled closing of a container (1) with a corresponding threaded cap (3), the method including:

moving said container (1) to a cap (3) feeding station, where a cap (3) is placed on a threaded end of said container (1);

taking said container (1) together with said cap (3) to a closing station, where said cap (3) is screwed to said container (1);

the method being characterized in that it further includes:

detecting, during the cap screwing step, the instant value of the torque applied to said cap (3) and comparing said instant value with at least one pre-selected threshold value, in order to verify, in relation with said threshold value having been reached and with the moment in which said value is reached, a stable tightening if said cap (3) onto said container (1).

2. A method as claimed in claim 1, characterized in that screwing action of said cap (3) to said container (1) is actuated for a selected number of turns, and that the correct closure of said container (1) is determined in relation to the reaching or exceeding of said selected threshold value of the torque, when the predetermined number of turns has been completed.

3. A method as claimed in claim 1, characterized in that screwing action of said cap (3) to said container (1) is actuated for a selected time, and the correct closure of said container (1) is determined in relation to the reaching or exceeding of said selected threshold value of the torque, when the selected time has elapsed.

4. A method as claimed in one of the previous claims from 1 to 3, characterized in that detection of the value of the torque includes converting thereof into an electric signal and sending this electric signal to a control unit (3), to evaluate the electric signal.

5. A device (50) for controlled closing of a container (1) with a corresponding threaded cap (3), the device including:

chuck means (10), which retain, with friction, a cap (3) placed on a relative container (1);

motor means (15), connected mechanically to said chuck means (10), to drive said chuck means and said threaded cap (3) into rotation in a direction for screwing said cap (3) to said container (1);

the device being characterized in that it further includes:

means (20) for torque detecting, situated between said motor means (15) and said chuck means (10), to measure the instant value of the torque applied to said cap (3) during rotation of the chuck means (10); and

a control unit (30) connected to said torque detecting means (20) to receive from the latter said torque value and to compare it with a selected threshold value, and to

verify, in relation with reaching of said threshold value and of the moment in which said value is reached, that said container (1) has been firmly closed with said cap (3).

6. A device as claimed in claim 5, characterized in that said torque detecting means (20) include a torque transducer (20), connected to a shaft (16) of said motor means (15) and to a stem (13) of said chuck means (10), to convert the instant value of the torque applied to said cap (3) into a corresponding electric signal.

7. A device as claimed in claim 5 or 6, characterized in that said motor means (15) include an positional controlled electric motor

8. A device as claimed in one of the previous claims from 5 to 7, characterized in that said motor means (15) include an induction "brushless" motor.